

REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

I. EXAMINER INTERVIEW, CLAIM STATUS & AMENDMENTS

Claims 1-3 and 5-10 were pending in this application when last examined, and stand rejected.

Applicant thanks Examiner Sakelaris for the interviews held May 16, 2005 and September 7, 2005.

During the later interview, Applicant proposed amending claim 1 to clarify that the labeling substance is positioned on the nucleic acid 0 to 1 nucleotides apart from the energy-absorbing substance. As noted in the interview, support can be found in Examples 1-2 and Figure 3. For instance, based on Example 1 on page 12, at lines 20-30, it is evident that the energy-absorbing substance (pyrene) is 0 to 1 nucleotides apart from the labeling substance (fluorescein). Specifically, EFN1-FP corresponds to a probe wherein the labeling substance is introduced into the nucleic acid 0 nucleotides apart from the energy-absorbing substance. EFN2-FP corresponds to a probe wherein the labeling substance is introduced into the nucleic acid one nucleotide apart from the energy-absorbing substance. See page 12, lines 26-30. These constructs can also be found Figure 3. See also the disclosure at lines 15-21 on page 7.

Claim 1 is amended to effect this change as discussed during the interview.

Therefore, no new matter has been added by this amendment.

II. FOREIGN PRIORITY

As noted on page 4 of the response filed February 4, 2005, a certified copy of the foreign priority document was submitted to perfect the claim of priority. However, on page 2 of the Office Action, it was indicated that foreign priority has not yet been granted, because an English translation of the priority document was not provided.

Kindly note that it is unnecessary to provide an English translation of the priority document to obtain the benefit of foreign priority. Generally, an English translation of the priority document is required only when an intervening prior art reference is used in a prior art rejection to reject the claims. This is not the case in the instant application. Thus, kindly acknowledge the foreign priority claim and receipt of the certified copy of the foreign priority document.

III. ANTICIPATION REJECTION

Claims 1-3 and 5-10 remain rejected under 35 U.S.C. § 102(b) as anticipated by Livak. See item 1 on pages 3-7 of the Office Action.

It is respectfully submitted that the present amendment overcomes this rejection as applied to the amended claims.

As noted on page 5 of the previous response, claim 1, as amended in the response filed January 4, 2005, requires that the energy-absorbing substance “interacts with the double-stranded nucleic acid due to the hybridization of the probe of the target nucleic acid thereby resulting in no quenching.” Again, it is respectfully submitted that such language requires the sequential of steps of hybridization, intercepting and not quenching. This language is consistent with the disclosure at page 8, lines 11-29. Livak simply fails to disclose or suggest this element of the claimed invention. Furthermore, as discussed in the previous response, Livak fails to disclose the requirement for interception to result in no quenching. Also, the probe in Livak is structurally different in that it involves a conformational change, not present in the claimed invention. The arguments set forth on pages 4-6 of the previous response are reiterated herein.

Nonetheless, to expedite prosecution, claim 1 is amended to require that “the labeling substance is positioned on the nucleic acid 0 to 1 nucleotides apart from the energy-absorbing substance” as supported by Examples 1-2 and Figure 3 of the disclosure.

This claimed structure is neither disclosed nor suggested in Livak. Instead, Livak teaches (column 4, lines 41-45) that the “ologonucleotide prove also exists in at least one conformation

when hybridized to a target polynucleotide where the quencher molecule is not positioned close enough to the reporter molecule to quench the fluorescence of the reporter molecule.” (Emphasis added). Moreover, Livak also discloses (column 5, lines 3-8) that the reporter molecule is separated from the quencher molecule by at least about 15 nucleotides.

Accordingly, Livak fails to disclose or suggest a probe having a labeling substance which is 0 to 1 nucleotide apart from the energy-absorbing substance. In fact, Livak teaches away from this concept as noted above. Accordingly, the probe in Livak is structurally different from that of the claimed invention.

Therefore, Livak fails to disclose each and every element in the claimed invention.

In view of the above, the rejection of claims 1-3 and 5-10 under 35 U.S.C. § 102(b) is untenable and should be withdrawn.

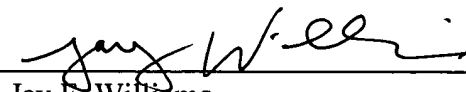
CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

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